

Amendment to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claim 1. (Currently Amended) An electronic commerce card authentication system comprising:

a merchant system wherein the merchant system is configured to:

send a verifying enrollment request to a directory server, the verifying enrollment request including at least a portion of an electronic commerce card account number;

receive a verifying enrollment response from the directory server, the verifying enrollment response including a web site hosted by a central transaction server, the verifying enrollment response further including a pseudonym corresponding to the electronic commerce card account number, the pseudonym expiring after a predetermined period of time;

send an authentication request to a cardholder system in a web page having an HTTP redirect command comprising the web site hosted by the central transaction server, the web page further including a URL for returning information to the merchant system, the authentication request including the pseudonym corresponding to the electronic commerce card account number;

receive an authentication response from the cardholder system at the URL for returning information to the merchant system; and

analyze the authentication response to determine if the electronic commerce card account number has been successfully authenticated and ~~initiate~~ initiates a payment request process by submitting the electronic commerce card account number to an issuer of the electronic commerce card account number;

the directory server wherein the directory server is configured to:

receive the verifying enrollment request from the merchant ~~system~~ server;

forward the verifying enrollment request to the central transaction server;

receive the verifying enrollment response from the central transaction

server; and

forward the verifying enrollment response to the merchant system; and
the central transaction server wherein the central transaction server is configured
to:

- receive the verifying enrollment request from the directory server;
- send the verifying enrollment response to the directory server;
- receive the authentication request from the cardholder system, at the web
site hosted by the central transaction server in response to the HTTP redirect command sent by
the merchant system to the cardholder system;
- forward the authentication request to an access control server;
- relay authentication information between the access control server and the
cardholder system;
- receive an authentication response from the access control server;
- forward a copy of the authentication response to an authentication history
server to be archived; and
- forward the authentication response to the cardholder system.

Claim 2. (Previously Presented) The electronic commerce card authentication
system of claim 1, wherein the authentication response is translated to a format compatible with
a merchant system.

Claim 3. (Canceled)

Claim 4. (Canceled)

Claim 5. (Previously Presented) The electronic commerce card authentication
system of claim 1, wherein the central transaction server is configured to send the verifying
enrollment response in response to a query to the access control server.

Claim 6. (Previously Presented) The electronic commerce card authentication
system of claim 1, wherein the central transaction server is configured to send the verifying
enrollment response to the directory server with or without querying the access control server,

and further is configured to query the access control server in response to receiving an authentication request.

Claim 7. (Previously Presented) The electronic commerce card authentication system of claim 1, wherein the pseudonym was previously created by the central transaction server.

Claim 8. (Currently Amended) The electronic commerce card authentication system of claim 1, wherein the pseudonym was created by a the merchant system.

Claim 9. (Canceled)

Claim 10. (Previously Presented) A method of authenticating electronic commerce card information provided by a cardholder, the method comprising:

- sending a verifying enrollment request from a merchant system to a directory server, the verifying enrollment request including at least a portion of an electronic commerce card account number;

- sending the verifying enrollment request from the directory server to a central transaction server;

- sending a verifying enrollment response from the central transaction server to the directory server, the verifying enrollment response including a web site hosted by the central transaction server, the verifying enrollment response further including a pseudonym corresponding to the electronic commerce card account number, the pseudonym expiring after a predetermined period of time;

- sending the verifying enrollment response from the directory server to the merchant system;

- sending an authentication request to a cardholder system in a web page having an HTTP redirect command comprising the web site hosted by the central transaction server, the web page further including a URL for returning information to the merchant system, the authentication request including the pseudonym corresponding to the electronic commerce card account number;

receiving the authentication request from the cardholder system, at the web site hosted by the central transaction server in response to the HTTP redirect command sent by the merchant system to the cardholder system;

forwarding the authentication request to an access control server;

relaying, at the central transaction server, authentication information between the access control server and the cardholder system;

receiving an authentication response from the access control server at the central transaction server;

forwarding a copy of the authentication response to an authentication history server to be archived;

forwarding the authentication response to the cardholder system from the central transaction server;

receiving the authentication response from the cardholder system at the URL for returning information to the merchant system; and

analyzing the authentication response at the merchant system to determine if the electronic commerce card account number has been successfully authenticated and initiating a payment request process by submitting the electronic commerce card account number to an issuer of the electronic commerce card account number.

Claim 11. (Previously Presented) The method of claim 10, wherein the authentication response is translated to a format compatible with a merchant system.

Claim 12. (Canceled)

Claim 13. (Canceled)

Claim 14. (Previously Presented) The method of claim 10, wherein the verifying enrollment response is sent in response to a query to the access control server.

Claim 15. (Previously Presented) The method of claim 10, wherein the verifying enrollment response is sent to the directory server without querying the access control server,

and further comprising querying the access control server in response to receiving an authentication request.

Claim 16. (Previously Presented) The method of claim 10, wherein the authentication request was previously created by the central transaction server.

Claim 17. (Previously Presented) The method of claim 10, wherein the pseudonym was previously created by the merchant system.

Claim 18. (Canceled)

Claim 19. (Previously Presented) An information storage medium including a set of instructions which when executed by an information processing device cause the information processing device to perform a set of steps, the set of steps comprising:

- receiving a verifying enrollment request from a directory server;

- sending a verifying enrollment response to the directory server;

- receiving an authentication request from a cardholder system, at a web site hosted by a central transaction server in response to an HTTP redirect command sent by a merchant system to the cardholder system, the HTTP redirect command comprising the address of the central transaction server and including a pseudonym corresponding to an electronic commerce card account number;

- forwarding the authentication request to an access control server;

- relaying authentication information between the access control server and the cardholder system;

- receiving an authentication response from the access control server;

- forwarding a copy of the authentication response to an authentication history server to be archived; and

- forwarding the authentication response to the cardholder system, wherein the authentication response includes a URL for returning information to the merchant, the cardholder system thereafter forwarding the authentication response to the merchant system, wherein the merchant system analyzes the authentication response to determine if the electronic commerce

card account number has been successfully authenticated and initiates a payment request process by submitting the electronic commerce card account number to an issuer of the electronic commerce card account number.

Claim 20. (Currently Amended) The information storage medium of claim 19, wherein the authentication response is translated to a format compatible with the a merchant system.

Claim 21. (Canceled)

Claim 22. (Canceled)

Claim 23. (Previously Presented) The information storage medium of claim 19, wherein the verifying enrollment response is sent in response to a query to the access control server.

Claim 24. (Currently Amended) The information storage medium of claim 19, wherein the verifying enrollment response is sent to the directory server without querying the access control server, and the set of steps further comprise querying the access control server in response to receiving the an authentication request.

Claim 25. (Previously Presented) The information storage medium of claim 19, wherein the pseudonym was previously created by the central transaction server.

Claim 26. (Currently Amended) The information storage medium of claim 19, wherein the pseudonym was previously created by the a merchant system.

Claim 27. (Canceled)

Claim 28. (Original) The method of claim 14, further comprising:
receiving the verifying enrollment response from the access control server in response to the query; and
forwarding the verifying enrollment response to the directory server.

Claim 29. (Original) The method of claim 28, further comprising:
modifying the verifying enrollment response received from the access control
server; and
forwarding the modified verifying enrollment response to the directory server.

Claim 30. (Currently Amended) The information storage medium of claim 23 ~~19~~,
further comprising:
receiving the verifying enrollment response from the access control server in
response to the query; and
forwarding the verifying enrollment response to the directory server.

Claim 31. (Original) The information storage medium of claim 30, further
comprising:
modifying the verifying enrollment response received from the access control
server; and
forwarding the modified verifying enrollment response to the directory server.

Claim 32. (Previously Presented) The system of claim 1 wherein the payment
request process includes a charge request, wherein the charge request is generated by a merchant
and is subsequently sent to an acquirer.

Claim 33. (Previously Presented) The method of claim 10 wherein the payment
request process includes a charge request, wherein the charge request is generated by a merchant
and is subsequently sent to an acquirer.

Claims 34.-37.(Canceled)

Claim 38. (Previously Presented) The system of claim 1, wherein the central
transaction server is further configured to host at least one web page.

Claims 39.-40. (Canceled)

Claim 41. (Currently Amended) The system of claim 1 wherein the predetermined period of time is 5 minutes.

Claim 42. (Canceled)

Claim 43. (Previously Presented) The system of claim 1 wherein the payment request process includes a cardholder authentication verification value which indicates the electronic commerce card has been successfully authenticated.

Claim 44. (Previously Presented) The method of claim 10 wherein the payment request process includes a cardholder authentication verification value which indicates the electronic commerce card has been successfully authenticated.

Claim 45. (Previously Presented) The system of claim 1, wherein the central transaction server and the directory server are integrated into a single server.

Claim 46. (Previously Presented) The method of claim 10, further comprising substituting the authentication response from the access control server with a response generated by the central transaction server.